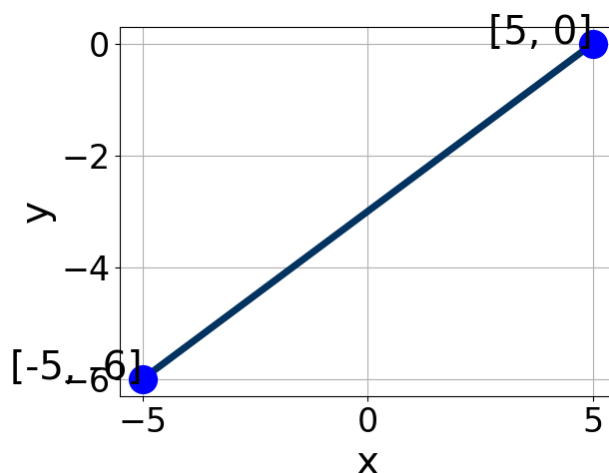


1. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain A , B , and C .



- A. $A \in [-0.1, 4.5]$, $B \in [4.6, 8]$, and $C \in [-16, -12]$
B. $A \in [-1.8, -0.5]$, $B \in [-1.9, 0.2]$, and $C \in [3, 8]$
C. $A \in [-1.8, -0.5]$, $B \in [0.3, 2.3]$, and $C \in [-8, 2]$
D. $A \in [-5.1, -2.3]$, $B \in [4.6, 8]$, and $C \in [-16, -12]$
E. $A \in [-0.1, 4.5]$, $B \in [-5.7, -4.3]$, and $C \in [10, 21]$

-
2. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b .

Perpendicular to $7x - 8y = 5$ and passing through the point $(10, 9)$.

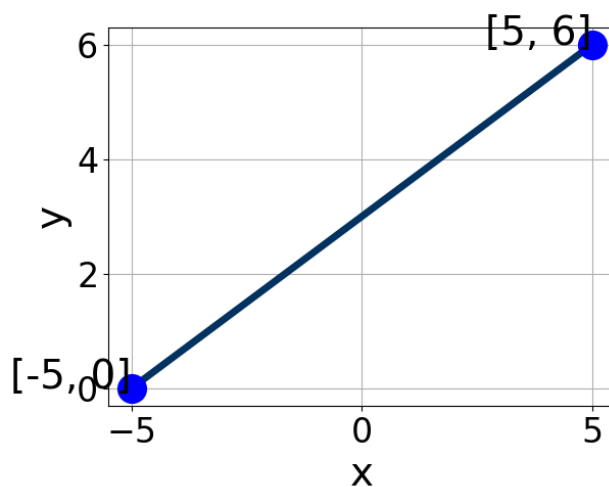
- A. $m \in [-1.6, -0.99]$ $b \in [19.4, 20.9]$
B. $m \in [-1.6, -0.99]$ $b \in [-21.4, -18.8]$
C. $m \in [-1.6, -0.99]$ $b \in [-1.3, 0.8]$
D. $m \in [-1, -0.6]$ $b \in [19.4, 20.9]$
E. $m \in [0.64, 1.8]$ $b \in [-3.4, -1.8]$

3. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{-6x - 5}{7} - \frac{-7x + 5}{2} = \frac{4x - 5}{4}$$

- A. $x \in [-1.2, -0.5]$
 - B. $x \in [2.8, 3.7]$
 - C. $x \in [-3, -1.3]$
 - D. $x \in [0.1, 2.9]$
 - E. There are no real solutions.
-

4. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain A , B , and C .



- A. $A \in [-1.6, 2.4]$, $B \in [-2.4, -0.9]$, and $C \in [-3, 2]$
 - B. $A \in [-1.6, 2.4]$, $B \in [0.2, 1.3]$, and $C \in [-1, 4]$
 - C. $A \in [-4, -1]$, $B \in [4.1, 7.1]$, and $C \in [15, 20]$
 - D. $A \in [2, 5]$, $B \in [4.1, 7.1]$, and $C \in [15, 20]$
 - E. $A \in [2, 5]$, $B \in [-6.2, -4.8]$, and $C \in [-17, -14]$
-

5. Find the equation of the line described below. Write the linear equation

in the form $y = mx + b$ and choose the intervals that contain m and b .

Parallel to $5x + 9y = 15$ and passing through the point $(-4, 8)$.

- A. $m \in [-1.2, -0.25]$ $b \in [11.1, 12.1]$
 - B. $m \in [-1.2, -0.25]$ $b \in [4.7, 7.7]$
 - C. $m \in [-1.2, -0.25]$ $b \in [-6.8, -4.5]$
 - D. $m \in [-2.76, -1.62]$ $b \in [4.7, 7.7]$
 - E. $m \in [0.28, 1.49]$ $b \in [10, 10.3]$
-

6. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{-7x - 6}{6} - \frac{-7x - 6}{5} = \frac{-3x - 7}{7}$$

- A. $x \in [-1.16, 0.31]$
 - B. $x \in [-11.22, -9.83]$
 - C. $x \in [0.78, 2.83]$
 - D. $x \in [-2.53, -1.78]$
 - E. There are no real solutions.
-

7. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx + b$ and choose the intervals that contain m and b .

$(-3, 6)$ and $(7, -11)$

- A. $m \in [-3.5, -0.8]$ $b \in [-0.4, 4.1]$
- B. $m \in [-3.5, -0.8]$ $b \in [-19.6, -14.5]$
- C. $m \in [1.6, 3]$ $b \in [-25.8, -21.7]$
- D. $m \in [-3.5, -0.8]$ $b \in [-3.2, -0.1]$
- E. $m \in [-3.5, -0.8]$ $b \in [6.1, 10.3]$

8. Solve the equation below. Then, choose the interval that contains the solution.

$$-12(5x - 2) = -9(15x + 7)$$

- A. $x \in [-1.35, -1.05]$
 - B. $x \in [0.34, 0.63]$
 - C. $x \in [-0.53, -0.24]$
 - D. $x \in [-0.31, -0.12]$
 - E. There are no real solutions.
-

9. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx + b$ and choose the intervals that contain m and b .

$$(-8, 5) \text{ and } (8, 4)$$

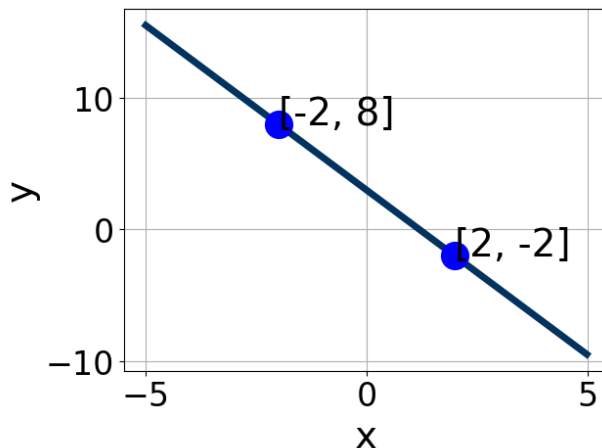
- A. $m \in [-0.4, -0.02]$ $b \in [12.97, 13.53]$
 - B. $m \in [0.04, 0.09]$ $b \in [3.45, 4.08]$
 - C. $m \in [-0.4, -0.02]$ $b \in [3.96, 4.57]$
 - D. $m \in [-0.4, -0.02]$ $b \in [-4.05, -3.8]$
 - E. $m \in [-0.4, -0.02]$ $b \in [-4.61, -4.44]$
-

10. Solve the equation below. Then, choose the interval that contains the solution.

$$-14(13x + 18) = -17(-4x - 9)$$

- A. $x \in [-0.79, 0.13]$
- B. $x \in [-1.73, -1.55]$
- C. $x \in [-1.15, -0.65]$
- D. $x \in [0.34, 0.59]$
- E. There are no real solutions.

11. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain A , B , and C .



- A. $A \in [4, 7]$, $B \in [-3.08, -1.52]$, and $C \in [-7.9, -5.6]$
B. $A \in [-8, 1]$, $B \in [-3.08, -1.52]$, and $C \in [-7.9, -5.6]$
C. $A \in [-1.5, 4.5]$, $B \in [-0.21, 1.61]$, and $C \in [1.6, 5.1]$
D. $A \in [4, 7]$, $B \in [1.83, 2.1]$, and $C \in [5.1, 9.2]$
E. $A \in [-1.5, 4.5]$, $B \in [-1.55, -0.71]$, and $C \in [-3.7, -1.5]$

12. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b .

Parallel to $8x - 7y = 13$ and passing through the point $(-7, 7)$.

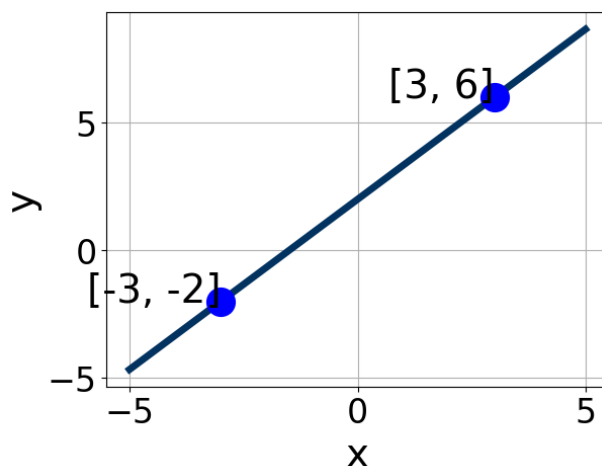
- A. $m \in [0.96, 1.48]$ $b \in [13.02, 14.67]$
B. $m \in [-1.2, -0.85]$ $b \in [-1.17, -0.99]$
C. $m \in [0.96, 1.48]$ $b \in [-15.32, -14.66]$
D. $m \in [0.74, 1.11]$ $b \in [14.79, 15.09]$
E. $m \in [0.96, 1.48]$ $b \in [14.79, 15.09]$

13. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{-6x + 7}{2} - \frac{-5x + 7}{6} = \frac{-7x + 3}{8}$$

- A. $x \in [-0.6, 0.5]$
 - B. $x \in [0.4, 3.3]$
 - C. $x \in [-4.2, -1.8]$
 - D. $x \in [1.6, 4]$
 - E. There are no real solutions.
-

14. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain A , B , and C .



- A. $A \in [-2.1, -1.2]$, $B \in [-2.7, -0.4]$, and $C \in [-2.1, -0.5]$
 - B. $A \in [2.6, 7.1]$, $B \in [2.5, 5.2]$, and $C \in [4.8, 9.5]$
 - C. $A \in [-2.1, -1.2]$, $B \in [0.5, 1.4]$, and $C \in [-0.1, 2.9]$
 - D. $A \in [2.6, 7.1]$, $B \in [-3.2, -2.6]$, and $C \in [-7.8, -4]$
 - E. $A \in [-4.9, -3.5]$, $B \in [2.5, 5.2]$, and $C \in [4.8, 9.5]$
-

15. Find the equation of the line described below. Write the linear equation

in the form $y = mx + b$ and choose the intervals that contain m and b .

Parallel to $7x - 5y = 7$ and passing through the point $(7, -4)$.

- A. $m \in [0.83, 2.03]$ $b \in [12.9, 16.6]$
 - B. $m \in [-2.1, -1.18]$ $b \in [5.4, 7.1]$
 - C. $m \in [0.59, 0.78]$ $b \in [-15.3, -13.5]$
 - D. $m \in [0.83, 2.03]$ $b \in [-15.3, -13.5]$
 - E. $m \in [0.83, 2.03]$ $b \in [-11.2, -10.6]$
-

16. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{3x + 4}{3} - \frac{-7x - 7}{5} = \frac{5x - 9}{2}$$

- A. $x \in [44.33, 46.33]$
 - B. $x \in [-4.45, -0.45]$
 - C. $x \in [67.33, 78.33]$
 - D. $x \in [197, 204]$
 - E. There are no real solutions.
-

17. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx + b$ and choose the intervals that contain m and b .

$(-2, -10)$ and $(-9, 11)$

- A. $m \in [2, 12]$ $b \in [33, 41]$
- B. $m \in [-6, -2]$ $b \in [10, 17]$
- C. $m \in [-6, -2]$ $b \in [-20, -9]$
- D. $m \in [-6, -2]$ $b \in [-8, -6]$
- E. $m \in [-6, -2]$ $b \in [19, 23]$

18. Solve the equation below. Then, choose the interval that contains the solution.

$$-2(-8x + 12) = -5(-18x - 16)$$

- A. $x \in [-1.56, -1.34]$
 - B. $x \in [-1.1, -0.59]$
 - C. $x \in [0.61, 1.06]$
 - D. $x \in [-0.75, -0.25]$
 - E. There are no real solutions.
-

19. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx + b$ and choose the intervals that contain m and b .

$$(7, -6) \text{ and } (10, -5)$$

- A. $m \in [0.19, 0.59]$ $b \in [-9.5, -7.3]$
 - B. $m \in [0.19, 0.59]$ $b \in [-14.2, -12.1]$
 - C. $m \in [0.19, 0.59]$ $b \in [6.3, 9.3]$
 - D. $m \in [0.19, 0.59]$ $b \in [-16.5, -13.7]$
 - E. $m \in [-0.48, -0.14]$ $b \in [-3, -0.1]$
-

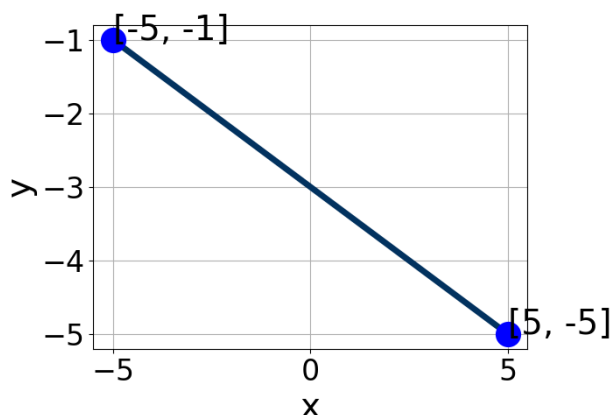
20. Solve the equation below. Then, choose the interval that contains the solution.

$$-5(12x + 6) = -2(3x + 11)$$

- A. $x \in [-0.22, 0]$
- B. $x \in [-1.08, -0.8]$
- C. $x \in [0.85, 1.13]$
- D. $x \in [-0.81, -0.78]$

E. There are no real solutions.

21. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain A , B , and C .



- A. $A \in [-0.5, 0.5]$, $B \in [-1.5, 0]$, and $C \in [1, 5]$
B. $A \in [-4.2, -1.5]$, $B \in [-6.6, -3.8]$, and $C \in [9, 19]$
C. $A \in [-0.5, 0.5]$, $B \in [0.2, 3.3]$, and $C \in [-6, -2]$
D. $A \in [1.7, 2.2]$, $B \in [-6.6, -3.8]$, and $C \in [9, 19]$
E. $A \in [1.7, 2.2]$, $B \in [3.5, 6.5]$, and $C \in [-21, -13]$

22. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b .

Perpendicular to $5x - 7y = 11$ and passing through the point $(3, -9)$.

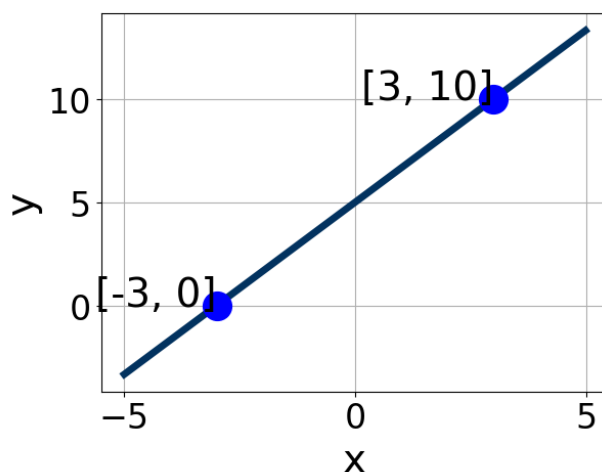
- A. $m \in [-1.95, -0.92]$ $b \in [-12.7, -11.3]$
B. $m \in [-1.95, -0.92]$ $b \in [-5.4, -2.3]$
C. $m \in [1.19, 2.58]$ $b \in [-14.4, -13.1]$
D. $m \in [-1.32, -0.04]$ $b \in [-5.4, -2.3]$
E. $m \in [-1.95, -0.92]$ $b \in [4.3, 7.1]$

23. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{-6x + 6}{7} - \frac{-3x + 4}{4} = \frac{4x - 8}{5}$$

- A. $x \in [-0.6, 1]$
 - B. $x \in [0.4, 1.9]$
 - C. $x \in [10.4, 12.3]$
 - D. $x \in [2.4, 4]$
 - E. There are no real solutions.
-

24. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain A , B , and C .



- A. $A \in [-3, 0.3]$, $B \in [-0.5, 2.4]$, and $C \in [0, 12]$
 - B. $A \in [-8.2, -1.7]$, $B \in [2.9, 3.9]$, and $C \in [15, 26]$
 - C. $A \in [2.4, 5.7]$, $B \in [-3.7, -2.4]$, and $C \in [-15, -13]$
 - D. $A \in [2.4, 5.7]$, $B \in [2.9, 3.9]$, and $C \in [15, 26]$
 - E. $A \in [-3, 0.3]$, $B \in [-2.2, -0.9]$, and $C \in [-8, -3]$
-

25. Find the equation of the line described below. Write the linear equation

in the form $y = mx + b$ and choose the intervals that contain m and b .

Parallel to $9x - 8y = 7$ and passing through the point $(-3, -5)$.

- A. $m \in [1.01, 1.38]$ $b \in [1.53, 1.73]$
 - B. $m \in [1.01, 1.38]$ $b \in [-1.96, -1.53]$
 - C. $m \in [1.01, 1.38]$ $b \in [-2.13, -1.8]$
 - D. $m \in [-0.45, 1.02]$ $b \in [-1.96, -1.53]$
 - E. $m \in [-1.49, 0.54]$ $b \in [-8.58, -8.29]$
-

26. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{-3x + 8}{3} - \frac{8x - 9}{7} = \frac{-3x - 9}{5}$$

- A. $x \in [2.73, 5.73]$
 - B. $x \in [-1.28, 1.72]$
 - C. $x \in [1.06, 3.06]$
 - D. $x \in [15.85, 18.85]$
 - E. There are no real solutions.
-

27. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx + b$ and choose the intervals that contain m and b .

$(-4, -3)$ and $(8, -9)$

- A. $m \in [-0.54, 0.07]$ $b \in [-8, -4]$
- B. $m \in [0.44, 0.55]$ $b \in [-13, -12]$
- C. $m \in [-0.54, 0.07]$ $b \in [-17, -15]$
- D. $m \in [-0.54, 0.07]$ $b \in [5, 7]$
- E. $m \in [-0.54, 0.07]$ $b \in [-3, 2]$

28. Solve the equation below. Then, choose the interval that contains the solution.

$$-15(-3x + 5) = -17(-19x + 11)$$

- A. $x \in [0.79, 1.37]$
 - B. $x \in [0.05, 0.69]$
 - C. $x \in [-1.11, -0.94]$
 - D. $x \in [0.57, 0.93]$
 - E. There are no real solutions.
-

29. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx + b$ and choose the intervals that contain m and b .

$$(-3, 9) \text{ and } (8, 2)$$

- A. $m \in [-2.49, 0.19]$ $b \in [10.07, 12.91]$
 - B. $m \in [0.47, 2.35]$ $b \in [-3.67, -2.56]$
 - C. $m \in [-2.49, 0.19]$ $b \in [-6.04, -5.31]$
 - D. $m \in [-2.49, 0.19]$ $b \in [-7.21, -6.31]$
 - E. $m \in [-2.49, 0.19]$ $b \in [6.55, 7.96]$
-

30. Solve the equation below. Then, choose the interval that contains the solution.

$$-15(13x + 14) = -12(-5x - 16)$$

- A. $x \in [-0.25, -0.11]$
- B. $x \in [-0.12, -0.05]$
- C. $x \in [-1.67, -1.46]$
- D. $x \in [0.01, 0.09]$
- E. There are no real solutions.

